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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,532	11/29/2001	SHAWN R. GETTEMY	PALM-3698	5478

7590 11/15/2005

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EXAMINER


RAO, SHRINIVAS H

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/997,532	Applicant(s) GETTEMY, SHAWN R.	
	Examiner Steven H. Rao	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-23 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-12,14-23 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgement is made of papers filed under 37 CFR 1.114 claiming priority from U.S. Serial No. 09/997,532 filed on November 29, 2001. An RCE has been established and an action on the RCE follows.

Therefore claims 1-32 as recited in the amendment accompanying the RCE are currently pending in the Application.

Claim Objections

Claims 1-32 are objected to because of the following informalities: , as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. All pending independent claims 1, 11 and 23 have been presently amended to include having at least one opening (through the reflective display) or similar language .

However the specification as originally filed does not specifically describe an opening or any opening therefore all independent claims 1, 11 and 23 and dependent claims there form are rejected as failing to comply with the written description requirement. Appropriate correction is required.

Claim Rejections - 35 USC Section 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action.

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-14 and 16-25 and 27-32 are rejected under 35 U.S.C. 103(a) as being obvious over Mamiya et al. (U.S. Patent No. 5,764,322, herein after Mamiya) in view of Kubo et al. (U.S. Patent No. 6,456,279 herein after Kubo) .

With respect to claims 1 and 12 Mamiya describe, etc., col. 8 lines 20-25) a reflective display disposed above said backlight device, (Mamiya fig. 14 # 108) .

Mamiya does not specifically describe an embedded light guide extending through said reflective display which conducts light from said backlight device to an area above said reflective display.

However Kubo in figure 4 and col. 8 lines 65 to col. 9 line 20 describes an embedded light guide extending through said reflective display which conducts light from said backlight device to an area above said reflective display so that an image of good visibility which has high luminance and is uniform over its entire reflective display area can be obtained even in an environment in which the external light is insufficient.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Kubo's embedded light guide extending through said

reflective display which conducts light from said backlight device to an area above said reflective display in Mamiya's device so that an image of good visibility which has high luminance and is uniform over its entire reflective display area can be obtained even in an environment in which the external light is insufficient. (Kubo col. 6 lines 5-10).

The remaining limitations of claim 1 :

wherein the light is reflected on to said reflective display. (Kubo figure 4). a front light reflecting film disposed in front of said reflective surface of said reflective display and wherein said front light reflective film is operable to reflect light emitted from said embedded light guide onto said reflective surface and wherein further said front light reflecting film is transparent to allow viewing of said reflective display.(Kubo in figure 4 and col. 8 lines 65 to col. 9 line 20, The recitation wherein said front light reflecting film is operable to reflect light emitted from said embedded light guide onto said reflective surface and to allow viewing of said reflective display is taken to be an intended use recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). a front light reflecting film disposed in front of said reflective surface of said reflective display Mamiya figure 14, #116 front light reflecting film is transparent Mamiya col.2 lines 52-55).

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With respect to claims 2 and 13 describe the display assembly of Claim 1, further comprising a front light reflecting film disposed above a top surface of said reflective display and operable to reflect light onto said top surface and being sufficiently transparent to allow viewing of said reflective display. (Mamiya figure 14, #116).

With respect to claims 3 and 14 describe the display assembly of Claim 1, wherein said backlight device is an electro-luminescent (EL) light device. (col. 10 lines 45-46).

With respect to claims 5 and 14 describe the display assembly of Claim 1, wherein said backlight device is a cold cathode fluorescent tube (CCFT) light device. (col. 10 lines 45-46).

With respect to claims 6 and 17 describe the display assembly of Claim 1, further comprising a brightness enhancing film (BEF) disposed between said backlight device and said bottom surface of said reflective display and for directing light toward said light guide. (Col. 9 lines 10-39).

With respect to claims 7 ,8, 29, 18, 19 , 30 and 31 describes the display assembly of Claim 1 , wherein said reflective display is an electronic ink display and an electronic paper display .

The limitations the reflective display is used as a electronic ink display and electronic paper display, these limitations recite the manner in which the claimed apparatus is intended to be employed.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from

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a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987).

With respect to claim 10 describes the display assembly of Claim 1, wherein said light guide comprises a plurality of said light guides which enclose an area of said reflective display. (col. 7 lines 21-25).

With respect to claim 11 describes the display assembly of Claim 10, wherein said plurality of said light guides enclose a sub-pixel of said reflective display. (Mamiya Figure 14, col. 7 lines 35-40, col. 10 line 35).

With respect to claim 21 describes the display assembly of Claim 1 , wherein said light guide comprises a plurality of said light guides which enclose an area of said reflective display. (Mamiya col.I lines 50-55)

With respect to claim 22 describes the display assembly Claim 12, wherein said plurality of said light guides enclose a sub-pixel of said reflective display. (Mamiya Figure 14, col. 7 lines 35-40).

With respect to claim 23 Mamiya describes a display assembly for an electronic device comprising : a backlight device, a reflective display disposed above said backlight device, and a plurality of light guides embedded within said reflective display and enclosing a display area within said reflective display, wherein said light guides conduct light from said backlight device to an area above said reflective display, wherein the light is reflected on to said reflective display. (Kubo figure 4). a front light reflecting film disposed in front of said reflective surface of said reflective display and wherein said front light reflective film is operable to reflect light emitted from said

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embedded light guide onto said reflective surface and wherein further said front light reflecting film is transparent to allow viewing of said reflective display. (rejected for reasons stated under claims 1,1 2 etc.).

With respect to claim 24 Mamiya describes the display assembly of Claim 23, further comprising a front light reflecting film disposed above said reflective display and operable to reflect said light back onto said reflective display and being sufficiently transparent to allow viewing of said reflective display. (rejected for same reasons as those stated under claim 2 above).

With respect to claim 25 Mamiya describes the display assembly of Claim 23, wherein said backlight device is an electro-luminescent (EL) light device. (Hirakata col.3 lines 1 7-20 , etc).

With respect to claim 27 Mamiya describes the display assembly of Claim 23, wherein said backlight device is a cold cathode fluorescent tube (CCFT) light device. (col. 10 lines 45-46).

With respect to claim 28 describes the display assembly of Claim 23, further comprising a brightness enhancing film (BEF) disposed above said backlight device and below said reflective display for directing light toward said plurality of light guides. (Col. 9 lines 10-39).

With respect to claim 32 describes the display assembly of Claim 23, wherein said plurality of light guides enclose a sub-pixel area of said reflective display. (Mamiya Figure 14, col. 7 lines 35-40).

B. Claims 4, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mamiya et al (U.S. Patent No. 5,764,322, herein after Mamiya) in view of Kubo (U.S. Patent No. 6,456,279, herein after Kubo) as applied to claims 1-3, etc. above and further in view of Hirakata et al. (U.S. Patent No. 6,191 , 833 herein after Hirakata) .

With respect to claim 4 Mamiya describes the display assembly of Claim 1.

Mamiya does not specifically describe the backlight device contains at least one light emitting diode (LED).

However, Hirakata in col. 3 lines 17 to 20 describes the back light can be a Led or fluorescent tube to save valuable real estate, provide a light source with longer life and also a device that does not generate as much heat thereby eliminating the need for heat removing devices like heat sink etc.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Hirakata's Led for Mamiya's fluorescent tube in Mamiya's device to save valuable real estate, provide a light source with longer life and also a device that does not generate as much heat thereby eliminating the need for heat removing devices like heat sink etc.

With respect to claim 15 describes the display assembly of Claim 12, wherein said backlight device contains at least one light emitting diode (LED). (Hirakata col.3 lines 17-20 , etc).

With respect to claim 26. The display assembly of Claim 23, wherein said backlight device contains at least one light emitting diode (LED).

Response to Arguments

Applicant's arguments (that are repeated and also stated in the previous response) filed on June 03, 2004 and June 18, 2004, February 14, 2005 have been fully considered but they are not persuasive for reasons set out previously and incorporated here by reference for the sake of brevity.

Applicants' contend that Mamiya alone or in combination with Kubo does not disclose or suggest

Having at least one opening there through . This is new matter see 112 objection above.

Assuming Applicants' some how overcome the new matter rejection , as stated in the rejection above Kubo in figure 4 and col. 8 lines 65 to col. 9 line 20 describes an embedded light guide extending through said reflective display which implies an opening through which the light guide is embedded.

An embedded light guide extending through said opening of said reflective display and extending beyond a reflective surface , Kubo in figure 4 shows light guide 2 extending at least beyond top reflective surface.

a front light reflecting film disposed in front of said reflective surface of said reflective display and wherein said front light reflecting film is operable to reflect light emitted from said embedded light guide onto said reflective surface and wherein said front light reflecting film is transparent to allow viewing of said reflective display.

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The recitation wherein said front light reflecting film is operable to reflect light emitted from said embedded light guide onto said reflective surface and to allow viewing of said reflective display is taken to be an intended use recitation.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987).

a front light reflecting film disposed in front of said reflective surface of said reflective display (Mamiya figure 14, #116).

front light reflecting film is transparent (Mamiya col.2 lines 52-55).

Therefore all of Applicants' above arguments are not persuasive therefore for reasons et out above the combination of Mamiya and Kubo describe/suggest all the presently recited limitations of independent claims 1, 12 and 23 .

It is noted that the references Mamiya and Kubo need not both teach all of the limitations as Applicants' seem to desire because if this were so then the outstanding rejection would be a 102 anticipatory rejection and not the outstanding 103 obviousness rejection.

Dependent claims 3 and 5-11; 14 and 15-22 and 25 and 27-32 dependent respectively from independent claims 1, 12 and 23 and were alleged to be essentially allowable because of their dependency upon allegedly allowable independent claims 1, 12 and 23 .

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However as shown above claims 1, 12 and 23 are not allowable , therefore all claims 1,3-12,14-23 and 25-32 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is (571)272-1718. The examiner can normally be reached on 8.00 to 5.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fahmy Wael can be reached on (571) 272-1714. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven H. Rao

Patent Examiner

November 10, 2005

LONG PHAM
PRIMARY EXAMINER